UNITED STATES DEPARTMENT OF THE INTERIOR PROFESSIONAL PAPER 305 PLATE 36 GEOLOGICAL SURVEY EXPLANATION RATE HOLE LITHOLOGIC SELECTED ZONE DIAMETER CORE OF CORE BIT NUME
(SIZE IN INCHES)
DRILL BIT
(SIZE IN INCHES)
(DASHED WHERE REAMET
DEPTH
(IN FEET) SPONTANEOUS COMPOSITION DEVIATION FORMATION PER PENETRATION DESCRIPTION GROUP MICROFAUNAL DEPTH (IN FEET) AND DIP RESISTIVITY POTENTIAL There is no discrepancy where core material is shown as clay shale but described as clay—the Upper Cretaceous shales are very soft, and material disintegrated; thus, in hand specimen it appeared to be clay although it was probably originally soft clay shale. It is believed that all samples described as clay below the base of the Gubik formation are really clay shale CASING NUMBER RECOVERY (FEET- INCHES) (DASHED WHERE CORED) (OHMS m²/m) DIAMETER Sand or sandstone AVERAGE MINUTES PER FOOT (MILLIVOLTS) = 40 + 10 15 20 25 50 Kelly bushing to ground - Ground level 151/2 NO 1 W-7R QUATERNARY Sand, medium-light-yellowish-gray; grains subangular to rounded; clear, milky, and yellow quartz; gray and black chert. Well rounded granules and pebbles of dark chert and yellow quartzite, also some clay. Base of Gubik approximate -161/2-Siltstone - Sea level 1742 22 NO.2 NO.3 HRK CBRK -13%-GUBI Calcareous siltstone 100 100 0°15′ 1°00′ RUN 1 Clay, clay shale, or clay -121/4-Sandy clay shale or claystone Clay, light-olive-gray; some medium-light-gray silt; possibly a very small amount of fine sand; subangular white quartz; volcanic glass shards very rare 200 Silty clay shale or claystone Calcareous clay shale or claystone Clay or clay shale, light- to medium-light-gray, slightly silty; fair cleavage; contains streaks up to 1 in. thick of a very fine claylike noncalcareous white material which is probably of volcanic origin. Imbedded in this material are quartz silt grains, rare plates of biotite, and carbonaceous flecks 0°10′ 1 4-0 **1** Y 300 300 Coal or carbonaceous material Limestone Clay, light-olive-gray; very small amount of silt and sand; subangular; white and clear quartz; opaque white glass shards common 400 Cored interval Shards rare

Clay shale, medium-light-gray, fuffaceous, fairly soft; fair to good cleavage parallels bedding; many very light-gray silty partings and thin laminae which contain abundant white claylike specks, biotite, and chlorite plates; carbonaceous flecks and rare resinous amberlike particles. Microscopic examination indicates white material is altered volcanic glass and ash. Most fluted shards are opaque white although all stages of alteration from clear glass to disintegrated particles were noted No samples recovered 0°10′ 2 8-0 - 500 500 Fine grained Electrode spacing SHORT NORMAL AM= 18 INCHES LONG NORMAL AM= 72 INCHES - Clay, medium-light-gray; some silt; shards very rare to rare 600 600 BIT SYMBOLS DRILL BITS CBRK Crum Brainard reamer Clay shale, tuffaceous, as in core 2 above. One 3/4 in. - diameter rounded and polished black chert pebble at 690 ft. This pebble is undoubtedly in place, imbedded in clay, and no other coarse material is associated with it HRK Hughes rock 0°20′ 3 10-0 3° 700 4. 9 700 w-7R Hughes W-7R OB-1 Security OB-1 sow Security OW Clay, medium-light-gray; some silty laminae; shards very rare at 700-810 ft; shards rare to common at 810-890 ft. One rounded black chert pebble at 820-830 ft. Inoceramus prisms - BOO CORE BITS B00 K-24 Reed K-24 hard formation PD-1 Reed wire line PD-1 PD-2C Reed wire line PD-2C Clay shale, very light- to medium-light-gray as above, tuffaceous; very good cleavage; abundant thin laminae and partings of tuffaceous material. Rare angular to subangular fine quartz sand grains are imbedded in lighter streaks 6°-7° 0°45 4 10-0 I Location: Lat 71°03'23" N. Lat 17'03'23 N.
Long 154'58'06" W.
Elevation: Kelly bushing 30.5 feet
Ground 15.5 feet
Spudded: May 6, 1950
Completed: June 3, 1950
Total depth: 3774 feet
Status: Dry and shandoned - Shards very rare - 1000 1000 Dry and abandoned Drilling and engineering data compiled from records of Arctic Contractors 8 Electric log by Schlumberger Well Surveying Corporation I All depths are measured from the top of the kelly bushing Clay; shards rare to fairly common; very small amount of white crystal-line calcite at 1050-1060 ft - 1100 U Colors were determined by comparison of dry samples with the National Research Council Rock Color Chart, 1948 1100

Siltstone, very calcareous; and finely crystalline light-gray limestone